

10/539047  
JC17 Rec'd PCT/PTO 15 JUN 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: **Kazuhiro NAKADAI et al.**

Serial No.: **Not yet assigned**

(§371 of international application No. PCT/JP2003/001434)

Filed: **June 15, 2005**

For: **ROBOTICS VISUAL AND AUDITORY SYSTEM**

Attorney Docket Number: **052696**

Customer Number: **38834**

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Date: June 15, 2005

Sir:

In compliance with 37 C.F.R. §1.56, Applicants direct the attention of the Patent and Trademark Office to the documents listed on the attached PTO/SB/08. A copy of each non-U.S. document is enclosed herewith.

In the event there are any fees due in connection with the filing of this paper, please charge Deposit Account No. 50-2866.

Respectfully submitted,

**WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP**

  
Stephen G. Adrian

Attorney for Applicants

Registration No. 32,878

Telephone: (202) 822-1100

Facsimile: (202) 822-1111

SGA/yap

Enclosure: PTO/SB/08, 12 documents and international search report.

Combined Form PTO/SB/08A&B  <b><u>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</u></b>  <i>(use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				Application Number	New Application <b>10/539047</b>
				Confirmation Number	
				Filing Date	June 15, 2005
				First Named Inventor	Kazuhiro NAKADAI et al.
				Art Unit	
Examiner Name					
Sheet	1	of	1	Attorney Docket Number	052696

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code <sup>2</sup> (if known)		
		US			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
/J.E./	1	JP	10-225892		08-25-1998	Nippon Telegr. & Teleph. Corp. (Cited in the int'l. search report).	Abstract
/J.E./	2	JP	2002-264053		09-18-2002	Japan Science & Technology Corp. (Cited in the int'l. search report).	Abstract
/J.E./	3	JP	2002-140092		05-17-2002	NEC Corp. (Cited in the int'l. search report).	Abstract

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.			Translation <sup>6</sup>
/J.E./	4	H. G. OKUNO et al.; "Human-Robot Interaction Through Real-Time Auditory And Visual Multiple-Talker Tracking", Proc. IEEE, Int'l. Conf. on Intelligent Robots & Systems, Vol. 3, Nov. 3, 2001, pp.1402-1409. (Cited in the int'l. search report).			Yes
/J.E./	5	K. NAKADAI et al.; "Epipolar Geometry Based Sound Localization And Extraction For Humanoid Audition", Proc. IEEE, Int'l. Conf. on Intelligent Robots & Systems, Vol. 3, Nov. 3, 2001, pp.1402-1409. (Cited in the int'l. search report).			Yes
/J.E./	6	Jon BAKER et al.; Robust ASR Based On Clean Speech Models: An Evaluation of Missing Data Techniques For Connected Digit Recognition in Noise", Eurospeech 2001- Scandinavia.			
/J.E./	8	Philippe RENEVEY et al.; "Robust Speech Recognition using Missing Feature Theory and Vector Quantization", Eurospeech 2001- Scandinavia.			
/J.E./	9	Kazuhiro NAKADAI et al.; Auditory Fovea Based Speech Enhancement and its Application to Human-Robot Dialog System", 7 <sup>th</sup> International Conference on Spoken Language Processing, Sept. 16-20, 2000, Denver, Colorado.			
/J.E./	10	Kazuhiro NAKADAI et al.; Auditory Fovea Speech Separation and its Application to Dialog System", Proceedings, Vol. 2, Sept.30- Oct.4, 2002, pp. 1320-1325.			Yes
	11	Kazuhiro NAKADAI et al.; "Speech Localization, Separation and Recognition by Active Audition for Humanoid", Japanese Society for Artificial Intelligence, Nov.22, 2002, pp.25-33.			Yes
/J.E./	12	Kazuhiro NAKADAI et al.; "Active Audition Based Human-Humanoid Interaction"			Abstract

Examiner Signature	/J.E./ 01/14/2011	Date Considered	
--------------------	-------------------	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to indicate here if English language Translation is attached.